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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/675,912      | 09/29/2000  | John H. Kickhaefer   | 6499-4              | 8982             |

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EXAMINER

FUREMAN, JARED

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2876

DATE MAILED: 08/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/675,912

Applicant(s)

KIEKHAEFER

Examiner

Jared J. Fureman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11, 15-26 and 30-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 15-26 and 30-86 is/are rejected.
- 7) ☒ Claim(s) 87-90 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7. 6) ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

Receipt is acknowledged of the preliminary amendment filed on 10/1/2001, which has been entered in the file. Claims 1-11, 15-26, and 30-90 are pending.

#### ***Specification***

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 30, and 31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8, 8, 2, 2, 4, 4, 4, 4, 5, 10, 18, 18, 12, 12, 13, 13, 14, 14, 15, 20, and 1 of U.S. Patent No. 6,290,137 B1 (hereinafter the '137 patent).

Although the conflicting claims are not identical, they are not patentably distinct from

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each other because claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 30, and 31 are functional equivalents of claims 8, 8, 2, 2, 4, 4, 4, 4, 5, 10, 18, 18, 12, 12, 13, 13, 14, 14, 15, 20, and 1, respectively, of the '137 patent, with some minor variations in wording/terminology. For example claim 6 of the '137 patent recites: a financial transaction card that is transparent to human viewing yet detectable by automated card processing equipment having near infrared source/detector pairs each having a source and a detector respectively positioned to face opposing sides of said card when said card is positioned in said equipment for detection and to detect said card by sensing an interruption of near infrared light transmitted from the source to the detector due to the presence of said card, comprising: a substantially planar material sheet having upper and lower surfaces bounded by a continuous peripheral edge, said material sheet being transparent to human viewing, and a near Infrared light filter covering one of said upper or lower surfaces of said material sheet, said filter comprising filtering means for producing sufficient card opacity relative to one or more near Infrared light wavelengths to render said card detectable by said source/detector pairs by blocking near Infrared light emitted by said source from reaching said detector, thereby triggering detection of said card, while still allowing said card to remain transparent to visible light such that definable images can be viewed through said card, wherein said filter is a light formed as a combination of a light absorbing material and a light reflecting or deflecting material, wherein said filter is formed from a light absorbing dye.

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4. Claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, and 73 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 6, 6, 2, 2, 4, 4, 4, 4, 5, 6, 6, 14, 10, 10, 11, 11, 12, 14, 13, 14, 14, 17, 17, 17, 17, 18, 19, 20, 21, 21, 22, 21, 20, 24, 25, 28, 29, 30, 30, 26, 27, 24, 27, 27, 24, 27, 33, 34, 39, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 35, 36, 36, and 17, respectively, of U.S. Patent No. 6,296,188 B1 (hereinafter the '188 patent). Although the conflicting claims are not identical, they are not patentably distinct from each other because 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, and 73 are functional equivalents of claims 6, 6, 2, 2, 4, 4, 4, 4, 5, 6, 6, 14, 10, 10, 11, 11, 12, 14, 13, 14, 17, 17, 18, 19, 20, 21, 21, 22, 21, 20, 24, 25, 28, 29, 30, 30, 26, 27, 24, 27, 27, 24, 27, 33, 34, 39, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 35, 36, 36, and 17, respectively, of the '188 patent, with some minor variations in wording/terminology. For example, claim 6 of the '188 patent recites: A financial transaction card that is transparent or translucent to human viewing yet detectable by automated card processing equipment having near Infrared source/detector pairs each having a source and a detector respectively positioned to face opposing sides of said card when said card is positioned in said equipment for detection and to detect said card by sensing an interruption of near Infrared light transmitted from said source to said detector due to the presence of said

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card, comprising: a substantially planar material sheet having upper and lower surfaces bounded by a continuous peripheral edge, said material sheet being transparent or translucent with respect to human visible light, and a near Infrared light filter covering one of said upper or lower surfaces of said material sheet, said filter comprising a screen-printed coating of a light filtering powder dissolved in a clear liquid carrier at a powder-to-carrier ratio of about 0.2-5% by weight, said filter producing sufficient card opacity relative to one or more near Infrared light wavelengths to render said card detectable by said source/detector pairs by blocking near Infrared light emitted by said source from reaching said detector, thereby triggering detection of said card, while still allowing said card to transmit human visible light, wherein said filter is formed from a light absorbing dye.

5. Claims 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, and 86 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 38, 38, 38, 38, 39, 39, 47, 47, 39, 39, 47, 49, and 49, respectively of U.S. Patent No. 6,296,188 B1 (hereinafter the '188 patent) in view of Kato et al (US 6,186,398 B1).

The '188 patent claims: A financial transaction card that is transparent or translucent to human viewing yet detectable by automated card processing equipment having near Infrared source/detector pairs, comprising: a sheet of material that is transparent or translucent to human viewing and having upper and lower surfaces bounded by a continuous peripheral edge, a near Infrared filter applied to cover one of said upper or lower surfaces of said material sheet, said filter comprising a coating on

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said material sheet of a light absorbing dye powder dissolved in a clear plastic resin-based liquid carrier at a powder-to-carrier ratio of about 0.2-5% by weight, whereby said filter provides sufficient card opacity relative to one or more near Infrared light wavelengths to render said card detectable by said source/detector pairs, while still allowing said card to transmit human visible light, and wherein said liquid carrier is a vinyl resin-based coating material that includes (by weight) about 20-25% vinyl resins, about 35-40% aromatic petroleum distillates, about 5-10% cyclohexanone, about 5-10% diacetone alcohol, about 5-10% gamma butyrolactone, less than about 5% naphthalene, and about 2% aliphatic petroleum distillates (see claim 38), wherein said filter is made from one or more layers comprising a mixture of a first organic solvent-soluble, near Infrared powdered absorption dye, a second organic solvent-soluble, near Infrared powdered absorption dye, said second dye having more Ultraviolet light and/or heat stability than said first dye, an organic solvent-soluble red colorant, an organic solvent-soluble blue colorant, a thinner, and said vinyl resin-based coating material, said thinner comprising all of the components of said coating material at the same ratios, with the exception of said vinyl resins which are not present in said thinner (see claim 39), wherein said filter is disposed on one side of said material sheet and a light scattering film is disposed on the other side of said material sheet (see claim 47), wherein the respective proportions of said dye, said UV absorber, said fluorescent blue colorant, said fluorescent red colorant, said thinner, and said vinyl resin-based coating material in said first mixture are about 13:4.33:65:21.66:130:633 by weight, wherein the respective proportions of said light scattering material, said fluorescent whitening agent and said

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vinyl resin-based coating material in said second mixture are about 90:2.5:907.5, wherein one or more filter layers of said first mixture and one or more light scattering film layers of said second mixture are used to produce a card having an opacity of approximately 0.8 at a wavelength of about 550 nm and approximately 1.5 at a wavelength of about 950 nm (see claim 49).

The '188 patent fails to claim a pair of substantially planar material sheets each having opposing first surfaces and non-opposing second surfaces, the surfaces being bounded by a continuous peripheral edge, printed graphics formed over the second surfaces, and clear protective overlay sheets formed over the printed graphics.

Kato et al teaches a financial transaction card (11), including: a pair of substantially planar material sheets (14, 14A) each having opposing first (the surfaces of sheets 14 and 14A which face towards each other) surfaces and non-opposing second surfaces (the surfaces of sheets 14 and 14A which face away from each other), the surfaces being bounded by a continuous peripheral edge, printed graphics formed over the second surfaces, and clear protective overlay sheets (21, 16) formed over the printed graphics (see figure 4, column 3 lines 14-36, column 4 lines 6-21, and column 8 lines 36-47).

In view of Kato et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the claims of the '188 patent, a pair of substantially planar material sheets each having opposing first surfaces and non-opposing second surfaces, the surfaces being bounded by a continuous peripheral edge, printed graphics formed over the second surfaces, and clear protective overlay

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sheets formed over the printed graphics, in order to a card having printing on both sides of the card, and to prevent damage to the printing by providing protection over the printing.

***Allowable Subject Matter***

6. Claims 1-11, 15-26, and 30-90 would be allowable over the prior art of record upon the filing of terminal disclaimers.

7. Claims 87-90 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is an examiner's statement of reasons for allowance and the indication of allowable subject matter: The prior art of record, taken alone or in combination, fails to teach or fairly suggest: a financial transaction card that is transparent to human viewing yet detectable by automated card processing equipment having near infrared source/detector pairs each having a source and a detector respectively positioned to face opposing sides of the card when the card is positioned in the equipment for detection and to detect the card by sensing an interruption of near infrared light transmitted from the source to the detector due to the presence of the card, the card comprising a near infrared light filter covering one of an upper or lower surface of a material sheet, the filter comprising filtering means for producing sufficient card opacity relative to one or more near infrared light wavelengths to render the card detectable by the source/detector pairs by blocking near infrared light, the filter being made from a first organic solvent-soluble near Infrared powdered absorption dye and a

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second organic solvent-soluble near Infrared powdered absorption dye with the second dye having more ultraviolet light and/or heat stability than the first dye with the first and second dye materials being dissolved in the liquid carrier, and the liquid carrier being a vinyl resin-based coating material that includes (by weight) about 20-25% vinyl resins, about 35-40% aromatic petroleum distillates, about 5-10% cyclohexanone, about 5-10% diacetone alcohol, about 5-10% gamma butyrolactone, less than about 5% naphthalene, and about 2% aliphatic petroleum distillates, in combination with the other claimed limitations as set forth in the claims.

While transparent cards having infrared light filters were well known to those of ordinary skill in the art at the time of the invention, the known cards utilize the light filters to encode information, see for example Travioli (US 3,536,894). Thus, there is no motivation for one of ordinary skill in the art to modify such a known card to include the filter covering the entire card, since this would prevent the card from carrying information encoded (by the presence or absence of the filter material at multiple locations within the card) by the filter material.

While West (US 5,005,873) teaches a card having a filter material (fluorescent material) covering the entire card, West fails to specifically teach the location of a source/detector pair. Since the system of West detects light emitted by the fluorescent material, this suggests that the source and detector are located on the same side of the card. Therefore, there is no motivation to modify the system as taught by West to include opposing sources and detectors with the card passing between the source and detector, even though it was known to those of ordinary skill in the art at the time of the

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invention to detect the presence of a card by passing the card between opposing sources and detectors (see for example, Liu et al (US 5,434,404) figure 4 and column 8 lines 1-11, and Kurihara et al (US 4,950,877) figures 1-2B and column 4 lines 11-17).

While the elements of claims 87-90 were well known to those of ordinary skill in the art at the time of the invention (see page 18, lines 24+ of the specification), there is no motivation (other than Applicant's) to combine this specified compound with the other claimed elements so as to produce the financial transaction card as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cocco (US 2002/0066790 A1), Finkelstein et al (US 5,856,661), Tsuboi et al (US 5,410,142), Drexler (US 5,241,165), West (US 5,005,873), Galvin et al (US 4,544,836), Albert et al (US 4,436,991), Toye et al (US 3,836,754), Berler (US 3,763,356), Travioli (US 3,536,894), (JP2001-319325), (JP 11-53496), (JP 11-20356), Bratchley et al (GB 2 229 189 A), Sothcott (GB 2 106 823 A), and Kato et al (EP 0 843 280 A2) all teach cards and/or marking agents having infrared/ultraviolet properties.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (703)

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305-0424. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

*Jared J. Fureman*  
Jared J. Fureman  
August 12, 2002